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ANNUAL ADDRESS

DELIVERED

BEFORE THE MEMBERS

OF THE

FREDERICTON ATHENÆUM,

FEBRUARY 25, 1856,

BY

CHIEF JUSTICE CARTER, PRESIDENT.

PRINTED BY ORDER OF THE SOCIETY.

FREDERICTON.

PRINTED AT THE ROYAL GAZETTE OFFICE.

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БЕЛЫЙ ГАУКИ

САНКТ-ПЕТЕРБУРГ

ПРЕДСТАВЛЕНЬЕ ЗВОНИЦЫ

БЕЛЫХ

ИУДИНА РОДОДНЯЯ

САНКТ-ПЕТЕРБУРГ

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ПРЕДСТАВЛЕНЬЕ ЗВОНИЦЫ

ПРЕДСТАВЛЕНЬЕ ЗВОНИЦЫ

ИУДИНА РОДОДНЯЯ

САНКТ-ПЕТЕРБУРГ

1851

ANNUAL ADDRESS.

This evening closes my second Presidential year, and commences the tenth year of the existence of this Society. It is pleasant to me to see around me at this time many of those who have been active and useful members of the Athenaeum from its first institution. Many of our original members have ceased to be among us—some from change of residence—others probably from ceasing to feel an interest in our proceedings sufficient to overcome the occasional trouble and inconvenience which may arise from a continued support of our objects. We may however be grateful when we consider how very few of our original members have been removed from us by the hand of death. Sincere indeed is my sorrow, that I have to notice almost the solitary instance as having occurred during the last year. You will all know that I allude to Mr. Justice Street. Much as I personally deplore his loss as one whom for more than twenty years I have been able to regard as a safe and steady friend, and for nearly half that period a most able and useful professional brother, I should not on that ground alone have deemed this a fitting place or occasion for alluding to matters merely private or professional. But he was known to you all. He was one of us from the first; and though from the constant professional or political labour which attended him through a long and useful life, he could find but little time to penetrate the depths of science, he brought with him here as every where, solid judgment, practical good sense, and above all that genial bright-heartedness, which made him always welcome in all circles, and which may well throw a sunshine of its own even on the dark recesses of science and the more sober paths of literature. He possessed an innate dignity of character which never failed to produce its effect in whatever position he was placed. I think I may safely say that no one who was ever connected with him in any matter, however

intricate and laborious, ever for a moment had reason to regret the association. If, like many of us, he could not assist in scientific or critical investigation, he was ever among us as a well informed gentleman, a character which must always add lustre to any society, whatever be its peculiar objects and pursuits. In him therefore I feel that this Society has sustained a loss; and I am sure that the feelings of those I am addressing will induce them to think I have not improperly availed myself of this occasion to record a tribute of respect to the memory of one deserving of respect, not merely as a member of this Society, but as a consistent politician, an honest lawyer, an impartial judge, a christian gentleman. I must not dwell longer on this painful topic, but proceed to that which is my peculiar duty this evening, viz. to offer you a concise history of the proceedings of the Athenæum during the past year. With respect to some of the Papers which have been read before the Society during that period, I labour under the disadvantage of not having heard them delivered, in consequence either of illness or necessary absence from Fredericton on professional duty.

The Paper of March was by Dr. Jacob, on the Crimea. Little more than a year ago, this word Crimea, would have excited but little interest in the minds of most of us. On a little reflection, and extra taxation of our geographical knowledge, we should have recollected there was a country called by that name in some remote part of the Black Sea. We might have had visions of a rude uncivilized region inhabited by wandering tribes of Tartars, and vague ideas that it was under the dominion of Russia, who had some fortified places, and built ships there, carried on considerable trade and commerce in the neighbourhood, and endeavoured as much as possible to monopolize to herself the advantages and knowledge of that region. At that time the names of Alma, Balaklava, Inkerman, Kertch, Perekop, and Sebastopol, would have fallen strangely on our ears; our fingers might have traced them on our maps, in following the route of some adventurous traveller, but we should have passed over them quickly, with little, probably, to fasten

them to our memory. How different is it now. For the last year the eyes of the British nation, I might almost say of the civilized world, have been constantly fixed on this small peninsula. Its mountains, rivers, towns, harbours, are familiar household words among us. Its localities are almost as well known to every British subject as those of his native place, and could we examine all the maps used in public or private throughout the British Dominions, I fancy we should find none bearing such marks of the thought of the statesman—the study of the warrior—the interest of every class—the very thumb of the schoolboy, as that which figures to the eye this small projection into the Black Sea. In treating this subject, the learned writer of this Paper has not *yet* (I lay an intentional stress on that monosyllable,) reached the modern history of the Crimea. With a vast amount of learning and research, he conducted us through the classic and middle ages of that country. It would seem from the earliest ages to have been considered a position of considerable importance by all those who sought to hold securely the neighbouring parts of Europe and Asia, commanding as it does, the outlets of so many rivers watering a large area of productive country,—as well as by those who sought to establish for themselves a secure base for aggressive operations, in the acquisition of dominion further South. If the lust of empire and the extension of dominion be virtues in a sovereign, we must award the merit of sound and long-sighted policy when Catharine of Russia, by her doubtful protection, obtained independence (so called,) for the Tartar Chan, and at the same time, some strongly fortified places for herself. This shadow of Tartar independence quickly vanished in the sunlight of protection, which soon after fully burst forth. The result was the abdication of the protected Chan, and the established sovereignty of Russia in the coveted dominions: this took place about 1784. The importance of this acquisition of territory, and the estimate of that importance by the sagacious Catharine and her worthy successors, may be well judged of by the enormous amount of wealth and labour expended in constructing, and the fearful

expenditure of human skill and human life, in defending the positions so obtained. It is obvious that by far the most interesting portion of the history of this country remains yet to be treated of by our learned friend. He may perhaps be waiting for the events of his last chapter. That he must speak of hardships and sufferings endured by the sons of England and France in support of the righteous cause undertaken by their respective countries, and of deeds of daring valour which may challenge all history to surpass, we know; and let us hope that at no distant period, he may tell of a termination of these glorious honors,—that peace is once more among the great nations of the earth—that the weaker people have been freed from the tightening grasp of their formidable neighbour—that a lasting lesson may have been taught to the craving ambition of Russia—and all that remains of the present state of things, may be that holy alliance between England and France, which, born as it has been in justice and right, may look to a long existence, fraught with incalculable advantages, political and social, to the two great nations which have formed it, and which, while it adheres to the principles in which it has been founded, will be a safeguard to the rights and liberties of the civilized world.

In the month of April we heard from Mr. Spurden a very interesting and amusing Paper on Figurative Language, in which, after giving a concise and accurate account of the subject of his Paper, the various forms of figurative language, and the rules to be observed in its use, he illustrated his subject very happily by instances drawn from the works of the best speakers and writers, as well as by specimens of its abuse. The latter were, some of them, rather extreme cases, but shewed the danger to which a careless speaker or writer may be exposed if he ventures on the florid style, without some natural taste, or knowledge of rules to restrain and guide him.

Some discussion arose after the reading of this Paper, as to whether the term "figurative language" could mean any thing more than language in general, inasmuch as the most ordinary language used on the commonest occasions, is for the most

part, strictly speaking, figurative, i. e. words are transferred from their proper signification to another different from it, by reason of some similitude between them whereby the proper derivation of one thing is applied to another. Now this is perfectly true, taking the term "figurative" literally, as few of us ever write or speak many words at any time, without unconsciously making use of metaphor. It is this unconsciousness of any thing figurative in the speaker and the hearer, which distinguishes these ordinary metaphors from those which are meant by writers on composition when treating of what they call figurative language. Indeed in many of the ordinary expressions of common intercourse, the word whose primitive meaning would give it a metaphorical character, has become so much more familiar in its secondary or metaphorical meaning, that the primitive meaning is almost forgotten, and is not recalled unless by some application of it metaphorically in some connexion utterly inconsistent with its primitive meaning. For instance, the verb "to embrace" means originally nothing more than to hold in the arms. In ordinary conversation we use it as signifying not merely to take in the arms, but to seize or take hold of generally. If one man were to say to another "I embrace the opportunity you offered me, or the offer you have made me," neither party would think of the opportunity or the offer being enfolded in the arms any more than he would of embracing his companion in a secondary and more tender sense of the word. But when, as I have somewhere read, a farmer wrote to his master that "if he met with any oxen he would not fail to embrace them," the metaphor at once strikes us as being carried somewhat beyond the bounds of elegance. There is perhaps more danger of offending by an improper mixture of metaphors when they are unpretending, than when they take a more lofty and poetical form, as if one was to say "the church was besieged with a *deluge* of troubles," where the two images *siege* and *deluge* bear no relation to each other. This error has been committed even by the immortal Shakspeare, in one of his most famous passages—in Hamlet—where the Prince of Denmark, according to his own statement, has serious

thoughts of "taking arms against a sea of troubles." Now try this mixed metaphor by one of the rules for testing its accuracy, viz. by drawing it as a picture, and it would not look very sublime to see Hamlet on one knee with fixed bayonet, prepared to resist the cavalry charge of the North Sea. But if the immortal Bard in this, and perhaps some other passages, may have set at defiance the rules of Cicero, Quintilian, and Doctor Blair, he has left us one of the most perfect metaphors, in the strictest and most beautiful accordance with every rule of nature or art, which ever proceeded from the pen of man, in the words he has put into the mouth of Wolsey, with which I shall conclude my remarks on this very interesting Paper of Mr. Spurden:—"This is the state of man; to-day he puts "forth the tender leaves of hope; to-morrow blossoms and "bears his blushing honors thick upon him. The third day "comes a frost, a killing frost, and—nips his root."

Doctor Blair himself could not have said this better.

In the month of May Professor Jack read a very useful and instructive Paper on Land Surveying. I was unfortunately prevented from hearing this Paper delivered, but I have read it with much attention, in spite of its opening paragraph which proclaimed the subject as "dry and uninviting." Certainly it is not one in which we should look for much to engage the passions, or exercise the fancy, and yet in its results I have often known its operations to rouse the most violent passions of the human heart, and if I mistake not, sometimes, inspired I suppose, by the wild scenery of the forest, the four-pole chain, the circumferenter, nay, even the needle itself (that emblem of constancy and truth,) have been guided by fancy more than by the rules of science and the formulæ of mathematics. In a country like this Province, where land and its productions are the principal sources of wealth and prosperity, and where the boundaries of land are rarely marked by fixed and permanent objects, but commonly by imaginary lines set out by distances on magnetic courses, that science which provides for the correct ascertainment of those lines must be one of paramount importance. Unfortunately, however, that importance is hardly felt

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till it has become in very many cases too late to remedy the evils which, had they been felt sooner, might have been more guarded against, if they could not have been altogether avoided. Fifty or sixty years ago, when a man obtained a grant of five or six hundred acres of wilderness land, barely worth as it then was, as many shillings as there were acres, he settled down with his family on a small spot on the banks of the stream which was his front boundary, and probably thought little and cared less, about the exact position of a rear line buried some miles behind him in the depth of the forest ; though he might see it very elaborately described in his grant, and very neatly drawn on his plan, as running from some hemlock tree (then probably in a state of vigorous vegetation) and running thence 60 chains of four poles each north 47 degrees west by the magnet. Nor would the precise angle at which his side lines were to run give him much concern in putting up his fences on the small part he could cultivate, as long as the Crown or his own immediate friends or relations were his neighbours. Such a man would feel little of the importance of the science of land surveying. But as years passed on, and he passed away, and the land came into the possession of his descendants—as the land became more and more valuable—as neighbours zealous for their full rights succeeded to the original friends as well as neighbours—as grants began to be multiplied and studied—and gentlemen armed with chains and circumferenters began to invade the deep recesses of the forest, in search of that rear line, suddenly made important as being the front line of another grant—when the ancestral woods began to echo the ominous sounds—*vi et armis, asportavit, quare clausum fregit*—when the luckless proprietor found himself the unknowing landlord of John Doe, or the helpless *locum tenens* of his loving friend Richard Roe ; and last though not least, the paymaster of an army of gentlemen well skilled in the law and the profits ; this individual might think any science important which, if properly applied at the proper time, would have saved him from such a predicament, and would raise an additional monument to an ancestor who had appreciated and availed himself of such

a science, and in the first instance fixed his right boundaries by the aid of skilful and well qualified surveyors. In the one case the unhappy descendant will in vain say to his neighbour's surveyor,—“*per meos fines lenis incedas*,”—in the other he might have inscribed on the ancestral monument—“*sunt certi denique fines*.”—I trust it will not be supposed from these observations that I think this a trifling matter. No man who has had over twenty one years experience on the Bench of this Province could, I am sure, so consider it. From disputes as to these magnetic lines, he would have seen, as I have, prolonged litigation, swallowing up often ten times the value of the land in question; bitter feelings of enmity engendered between neighbours, and handed down from generation to generation, as almost appurtenant to the land, and not unfrequently violence, bloodshed, and even loss of life. All this is well known, but as in many cases, it is an easier task to point out the evil than to suggest the remedy. Professor Jack has evidently felt this. No doubt, by means of proper instruments, placed in skilful hands, all new lines might be ascertained with perfect or nearly perfect correctness; but the difficulty is that really good instruments and really good operators cannot be looked for without really good pay. The expenses of such a survey would be generally so out of proportion to the present value of the land surveyed, as to prevent the grantee from resorting to it, and if done at the expense of the Crown, the auditing of the accounts of Crown Land revenue would, I fancy, result in a cipher. The legal tribunals of this Province have, I think, done something to mitigate this evil, by establishing the doctrine of boundaries fixed by consent and user, though varying from the precise terms of grants, a doctrine perhaps more reconcileable with the principles of common sense and urgent necessity than those of ancient law. To ensure as much as possible accuracy of operation in those surveyors who have deputations from the Crown Land Office, the suggestions of Professor Jack are well worthy of attention. We must presume that no person would ever be placed at the head of that department who does not thoroughly understand

the business of surveying, and he should be satisfied by examination of the competency of those to whom deputations are given. The accuracy of their instruments should be ascertained by frequent comparison with standards kept for that purpose at the office, and all practicable means should be taken to distribute among them rules for their guidance, especially on that most perplexing subject, the variation of the compass. Before I conclude this Address, I may make a suggestion on this point, which I hope may find favour with the Society.

The month of June was a barren one for the *Athenæum*, and produced no fruit. In July Mr. Fisher gave us a Paper on *Ancient Britain and the Druids*,—the last part of his subject really comprehending the whole, inasmuch as very little can be ascertained of the real history of ancient Britain previous to the Roman Conquest, beyond the history of that very singular portion of its inhabitants, who by the influence of their manifold functions, virtually possessed all power, spiritual and temporal, over the rest of the people. Their absolute authority in matters of religion, would alone have clothed them with great power among so rude a people, and when to this was added the entire management of all education, and the supreme power of administering justice and whatever law then existed, it will be readily supposed that in point of practical effect, they were the governing body of the nation. One of their regulations is much to be regretted, viz. that which stringently forbade any of their doctrines to be committed to writing. Hence all our knowledge concerning them is to be gathered from a few Greek and Latin writers, whose information was not probably very minute, and who can hardly be relied on as regards the Esoteric doctrines of the Druidical colleges and sacred groves. The fearful rites which formed part of their religion, in the lavish sacrifice of human life as a propitiatory offering to the Deity, are of course most shocking to the feelings of a Christian people; but judging by the history of other ancient nations, we should not be too severe on the Celtic Druids, when we find in other countries where the human mind

seemed to have advanced further in the path of civilization, the same disregard of human life, and the same sacrifice of it as a religious rite. The slaughter of prisoners of war,—the murder of men by the hands of their fellows, or the jaws of beasts in the arena, for the purposes of a spectacle, shew at least an equal disregard of human life, and proceeded from a less pardonable motive. In most things it would appear that the power of the Druids was exercised beneficially for the people whom they ruled. The ancient Britons would seem to have been a much more united and vigorous people when the Island was first invaded by the Romans, than when after years of persecution the Druids were finally extinguished by the Roman Governor of Britain, in the Isle of Anglesea, and the Britons after languishing for some centuries under Roman rule, were left, when Roman protection was withdrawn, a divided and enfeebled nation, unable to resist the attacks of their Northern neighbours, and compelled at last to sink under the friendly protection of the warlike Saxons.

In his Paper, Mr. Fisher contrived with a great deal of skill, to condense within a small space the chief matters worthy of notice respecting this singular people, beyond those which are mere subjects of curious research among antiquarians, and I think he deserves great credit for courage in attacking such a subject, and skill in the able management of the campaign on which he entered.

After our Summer recess, Dr. Robb in October delivered a Lecture on the physical features of the earth's surface. I wish I could say he had read a Paper on the subject, as I feel satisfied it would have been the unanimous wish of the Society that his valuable and interesting remarks should have assumed a more permanent form than the fleeting one of an extemporeaneous lecture. It would have enabled me, moreover, to have given you some abstract of the learned Professor's views on this most curious subject, which mere recollection will hardly enable me to do. On this occasion Dr. Robb availed himself of a very excellent Map of the World, on a very large scale, which probably assisted him in explaining his views, and cer-

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tainly materially assisted his audience in understanding them. It would have been very difficult, for me at least, to have thoroughly appreciated the explanations given on that occasion, of the various yet regulated phenomena on the surface of the earth, had not my eye been thus made to minister to my understanding. Without something visible before us we should have been lost in the vast extent over which we travelled, along ranges of mountains extending, not through a country or a kingdom, but through a hemisphere; when we heard the course of a vast ocean spoken of in familiar terms as the valley of the Atlantic; and we should have been startled at the sudden transition from the vast plains of Tartary to the table lands of South America. But with this map before us all these things were plain to the eye, and the ingenious deductions from effects of mountain ranges and their corresponding valleys, from the access or exclusion of the sea air, from the consequent abundance or scarcity of evaporation in producing similar climates independent of latitude, in affecting the fertility of the soil, the character of the inhabitants, the changes of empire, and the progress of the human race, were by the clear statements and reasoning of our able Secretary made, I think, abundantly and most agreeably obvious to all who were fortunate enough to hear him.

Having thus explored the earth's surface, we were in November led into the realms of fancy by a Paper on Poetical Parallels from the Rev. Dr. Brook. This Paper was deservedly received with marked approbation by the Society, and seemed to rouse in many of our members the same poetical enthusiasm which had evidently warmed the writer in treating of the merits and characteristics of the great masters of verse, both ancient and modern. The author of this Paper sanctioned the sentence of centuries in awarding the palm of poetical excellence to the well known Greek and Roman Epics of Homer and Virgil; an opinion which I am by no means inclined to dispute, for I believe, that, tried by the acknowledged rules of poetical composition, (many of which probably have their foundation in these very poems themselves), they reach a very high

degree of excellence ; but while my judgment, guided by established rules, admits this, I must confess (to my classical shame be it said) that I cannot derive the same pleasure from reading these master-pieces of poetry that I do from many in my own language, whose merits must be considered far below the Homeric or Virgilian standard. Perhaps I may connect the grandeur of the one and the elegance of the other too much with the Lexicon Hederici or the Dictionary of Ainsworth, and though, thanks to these able assistants, there was a time when the translation of such authors presented but little difficulty, I have never been able to derive pleasure from the reading of any author who did not clothe his thoughts in the language in which I speak and think. I must admit (though the confession requires some moral courage) that I derive more pleasure, that my feelings are more excited, and my sympathies more enlisted, by the narrative, the incidents, the language of our friend's countryman, in the *Cantos of Marmion*, than by the loves and quarrels, human and divine, attending the siege of Troy, and the subsequent events which occurred after the fall of that celebrated city. In one thing I most cordially agree with the author of this Paper, in deprecating the banishment of standard classical authors from the circle of education. The acquisition of a knowledge of the Greek and Latin languages I conceive to be a most wholesome exercise of the youthful mind. The knowledge itself when acquired is useful, and in some of the walks of life essential ; but the process by which that knowledge is acquired is perhaps more important, —as training the powers of the mind—as strengthening the memory—exercising the reasoning faculty by comparing one thing with another, and applying general rules to a variety of cases. One of them being the mother of many modern languages, renders the acquisition of these comparatively easy, and assists most materially in thoroughly understanding and appreciating the derivation, the meaning, the peculiar force of a great portion of our own language. I will admit that formerly the education of young persons was devoted too exclusively to these subjects, and that the subjects themselves

were used in a manner too restricted. It is I think a grievous mistake to make the ultimate object of such a course of study, merely the mysteries of the subjunctive mood, or the playful vagaries of a Greek particle. But if in giving a competent knowledge of the critical parts of these tongues, the mind of the student is directed to the various knowledge contained in the most celebrated authors of Greece and Rome, and other matters such as chronology, history, geography, are made incidents to grammatical learning, I can conceive of no course of study more efficient, as combining the most essential requisites for early education, by imparting knowledge useful in itself,—by training the mind in habits of care and order, and forming a strong and lasting basis, on which other parts of knowledge growing from the tastes or necessities of after life, may be the more easily and safely raised.

In illustration of his particular subject, the author of this Paper read several striking passages from different Poets on the theme of War, shewing how, according to the peculiar character of the Poet's mind, that subject was clothed in imagery of stately grandeur—heart stirring energy—tender sadness, or revolting horror. One can understand the power of the ancient Bards in rousing the rude warriors of their day to deeds of heroic valour, from the effect produced on this occasion by the recital of these passages, in awaking a warlike spirit even in classical bosoms; so that in that moment of enthusiasm, I believe a company of literary and scientific volunteers might have been formed in this room, ready to do mighty deeds, and defy all perils in a just and righteous cause. Dr. Brook held out some hope that he would pursue this very pleasant subject on other occasions; this hope will not, I trust, prove fallacious. The poetical treatment of the different passions,—love, hatred, fear, revenge,—present a wide field, in which our reverend friend's hearty love of his work will enable him to gather an abundant and interesting harvest.

In December, Mr. Roberts read a Paper on Oceanic and Atmospheric Currents. Such a subject needed not the apology made by the author for its selection. From its very nature it

could not be considered a dry subject, nor would the manner in which it was brought before us by any means qualify it for that distinction. It is a subject which has long been regarded with interest by the scientific, but has recently been taken up more earnestly, with a view to practical benefit for the purposes of navigation. From what has been done within the last few years, we may fairly hope that the time is not far distant when these tides of the ocean may be as well known, and be reduced to as fixed principles and rules, as the tides of the harbours. To treat with any degree of satisfaction on both these extensive matters, would hardly come within the usual limits of one paper. Mr. Roberts therefore wisely confined himself principally to the first branch of his subject, leaving the regions of the air to be explored (not I trust on Icarian wings), on some future occasion.

He afforded us a very judiciously condensed account of the principal currents known to exist in different parts of the ocean, more particularly those whose direction is constant and uniform. The two principal seem to be, that which flows round the circumference of the globe on either side of the equator with a course from east to west, deflected occasionally by the resistance of continents or large islands which produces among other effects, the well known Gulf Stream; and another flowing from either pole towards the equator. The main course of the first may be determined by the motion of the earth from west to east, the course of the other by the law of equilibrium. Had I not derived much useful information from Mr. Roberts' Paper, I should feel much obliged to its author for the inducement it has afforded me to read with attention the views of Lieut. Maury on the subject of the circulation of the ocean and air, and I think I may venture on one or two extracts from his most able treatment of these subjects, as a fitting sequel to Mr. Roberts' Paper.

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wind—we may lay it down as a rule that all the currents of the ocean owe their origin to difference of specific gravity between sea water at one place and sea water at another; for wherever there is such a difference, whether it be owing to difference of temperature or difference of saltiness, &c., it is a difference that disturbs equilibrium, and currents are the consequence. The heavier water goes towards the lighter and the lighter whence the heavier comes. That the sea in all parts hold in solution the same kind of solid matter; that its waters in one place, where it never rains, are not salter than the strongest brine, and that in another place, where the rain is incessant, they are not entirely without salt, may be taken as evidence in proof of a system of currents, or of circulation in the sea, by which its waters are shaken up and kept mixed together as though they were in a phial. Moreover we may lay it down as a law in the system of oceanic circulation, that every current in the sea has its counter current; in other words, that the currents of the sea are, like the nerves of the human system, arranged in pairs; for wherever one current is found carrying off water from this or that part of the sea, to the same part must some other current convey an equal volume of water, or else the first would, in the course of time, cease for the want of water to supply it."

I have been even more impressed by the views of Lieut. Maury, on the general circulation of the *Atmosphere*. Within a comparatively small space, he has concentrated the results of modern science on this most interesting subject, reducing the laws of atmospheric circulation to general principles, perfectly intelligible, founded on most lucid and satisfactory reasoning, and clothed by the writer in most attractive and even eloquent language. He shows the existence of one great constant current, with a course from pole to pole, which, acted on by the laws of motion and pneumatics, would produce the very results which we find to exist, in the trade winds and the regions of constant calms; that the local winds and storms we meet with, are in comparison with the general system of atmospheric circulation, but eddies to the main current, and

have no more effect in deranging or disturbing that system, than the shower which they bring with them has upon the gulf stream, and other great currants of the sea. He tells how admirably and constantly this great current of air manufactures and carries moisture and heat to the surface of the earth. He calls it an engine, of which the vast Southern Ocean is the boiler, and the Northern hemisphere the condenser. The great proportion of land in the globe, and all the great rivers of the world, are in the Northern hemisphere. The Southern is a vast expanse of ocean, the land occupying only one-tenth of its area. The vapour produced by the heat of the sun from this immense tract, is collected by the current of air passing from south to north, and is afterwards condensed and precipitated on the land of the Northern hemisphere, supplying thereby the fountains of its mighty rivers, giving out heat and moisture, tempering climate, nourishing animal and vegetable life, with a regularity and harmonious adaptation which can only proceed from Him who "measured the waters in the hollow of his hand, and comprehended the dust in a measure, and weighed the mountains in scales and the hills in a balance." Looking at the arrangement of the globe with such views, apparent disproportion becomes exact counterpoise; and had the proportion of land and water been different, the whole arrangement of the animal and vegetable kingdom would have been entirely different, but we may feel sure, not better than we now see it. You will I trust pardon me if (having already freely availed myself of Lieut. Maury's observations,) I conclude my remarks on this subject, with his concluding sentences, which plainly shew that in his mind the streams of science and piety flow side by side. Speaking of the currents of the sea and air, he says:—"Harmonious in their "action, they are obedient to law, and subject to order in all "their movements; when we consult them in their courses, "they teach us lessons: the investigations into that broad "spreading circle of phenomena connected with the winds and "the waves of the sea, are second to none for the good which "they do, and the profit which they give. The Astronomer

"sees the hand of God in the sky; but the right minded
"mariner, who looks aloft as he ponders these things, hears
"His voice in every wave of the sea, and feels His presence
"in every breeze that blows."

The last Paper of the year was delivered in January by Mr. Coster, on Islamism. The rise, progress, and effects of a system of religion, which for twelve centuries has prevailed in a large portion of the earth, cannot fail to be an interesting and useful subject for attentive consideration. Mr. Coster succeeded in compressing within the limits of a single Paper the principal events in the career of the founder of this system, and the prominent features of the system itself. There are few persons in the history of mankind of whose real character it is more difficult to form an accurate idea than Mohammed, and where so much has been written and various opinions expressed, I should feel much hesitation in giving an opinion on the subject. It cannot be disputed that he was a person of vast energy and sagacity, and possessed with that strong will which admits of no impossibilities, nor is diverted or turned aside from a fixed purpose, by obstacles, to common minds apparently insurmountable. He is called an enthusiast by some, an imposter by others. Probably he was both of these at different stages of his career. In the beginning of his course he may have been urged by a sincere desire, an enthusiastic impulse to change the worship of his countrymen from the gross idolatry then prevailing, to the pure worship of the one God—of the Jew and the Christian,—and this idea constantly working on an ardent and active mind, may have persuaded himself that he was destined by God to effect this change; but his wildest visions, at that time, could hardly have pictured to his imagination the height of power and dominion which he afterwards gained. As however in the progress of his career, this tempting height opened itself to his view, the mists of enthusiasm would be dissipated by the more dazzling blaze of worldly ambition, and the reformation of men's worship would become secondary and auxiliary to the acquisition of absolute dominion over their minds and actions.

If, as is confidently maintained by some, the Koran was in great part composed by a Monk named Sergius, or as asserted by others, the self styled Prophet was assisted in its production at different times by learned Jews, or Christians who from the various heresies prevalent about that time had been condemned by Councils and driven into the deserts of Arabia and Egypt, the divine dictation by the means of the Angel Gabriel, must have been a wilful imposture, and not the mistake of religious monomania. The Koran was certainly made subservient to the purposes and pleasures of its publisher. If any part interfered with any project it was summarily repealed. In the matter of wives, for instance, in which the incontinence of his disciples was restricted by the precepts of his religion, there was a special exemption in favour of the Prophet himself, who besides his numerous wives, allowed himself a variety of amours, which were prohibited by his own laws ; and when he was desirous of marrying the wife of his enfranchised servant and adopted son, a special revelation immediately appeared, recorded in a chapter of the Koran, authorizing the marriage, notwithstanding a degree of affinity which had always been regarded among the Arabs as an absolute prohibition. Whether however engendered in enthusiasm or imposture, the Mohammedian religion has been undoubtedly a very important item in the history of mankind. If Mr. Coster be right in supposing a special reference has been made to it in the Book of Revelation, we cannot doubt that it has been one of those steps in the progress of the world, ordained by one whose plans are marked out by wisdom and goodness, often apparent to our limited view, but sometimes defying the most sagacious speculations of human intellect. The continuance of this false religion for twelve centuries in a considerable portion of the globe, may seem long in the view of a being to whom threescore years and ten is a prolonged existence, and yet be as a moment in the plans and counsels of eternity. We can see that this system, the good part of which was undoubtedly taken from our Holy Scriptures, has preserved among a people before buried in gross idolatry, the fundamental doctrine of the Scriptures, the

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worship of the one only God, the duty of constant prayer to Him, and of charity and benevolence towards his creatures. The motives and rewards of obedience, founded entirely on the boundless gratifications of sensual appetite, must appear most gross and debasing to us who enjoy the purer motives and hopes of the Gospel. But they were skilfully adapted by Mohammed to the temperament of the eastern people, and served undoubtedly to recommend to them the better parts of his theology. To replace the sensual future of Mohammed by the spiritual Heaven of Christ, will probably require a previous training of the eastern mind in other matters besides theology. Till a recent period the studied discouragement in Mohammedan countries of all intercourse with christians tended to keep the streams of improvement stagnant. In modern times a change has been gradually taking place in this respect, which is not unlikely to be accelerated by what is now going on in the East. We may, I think, hope that events are now in progress, in an order assigned by Providence, which may in due time lead to the decay of the grosser parts of Mohammedanism, and engraft its better parts into the pure and holy religion of Christ.

I have now, I believe, brought under your notice all the Papers which have been read before the Society during the past year. They show satisfactorily that though we have been at work for nine years, there has not, so far, been found any lack of interesting subjects, or able writers to treat of them; and from such a past, I will look forward to a corresponding future. Before I close I have to make a proposition, which could not perhaps come from any one so well as myself, which as regards myself, I can assure you is made in perfect sincerity, and which I hope may be adopted by the Society. It has been the practice for many years, to print for circulation, the Annual Address of the President of the Athenæum. To omit that practice now, unless by the desire of the President himself, might perhaps be regarded as a slight to the person who is first subject to the change. This difficulty will be avoided if the proposition comes from the person affected by

such change, who cannot be supposed to violate the laws of human nature, by intending a slight upon himself. Now it appears to me that the expense hitherto incurred in this way, might be made more generally and practically useful in some other way. Many of the Annual Addresses which have been delivered from this chair, have been exceedingly able compositions, and highly interesting to those who had in the course of the year heard more fully treated of, the subjects which can only be slightly touched upon in the closing Address. But beyond the circle of the Athenæum itself, I much doubt the usefulness or interest of these Addresses. They may be read by the members of the Athenæum and by other personal friends of the writer, and there, as far as reading is concerned, I think it likely their destiny is fulfilled. Now among the Papers of the year, it would often happen (as it certainly has this year,) that one might be selected which would be practically and generally useful, the publication of which would be a more desirable object for the expenditure of the funds of the Society. The Paper which I would suggest for this purpose at this time, is that of Professor Jack, on Land Surveying, provided of course, such publication is approved of by the author. I have already expressed my opinion as to the importance of the subject of this Paper, in connection with the particular circumstances of this country, and I think the suggestions, the rules and the tables so presented by Professor Jack, in a short and intelligible form, would be of great service to all practical Surveyors who would avail themselves of such assistance. With this object before me, I have not written what you have heard this evening with any idea of publication, beyond this room. If you think fit to adopt the proposition I have made, I think you will do what may be really useful. For myself, if I have succeeded in reviving your interest in what has been done during the past year, or stimulating you to future exertion in the same course, my ambition will be satisfied, and I shall be content to leave my throne shorn of the typical honors of the Press.

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NOTE.—The appearance of this Address in print, will shew that the suggestion with
which it concludes was not adopted. Fully sensible of the kind consideration for myself,
included in the refusal of the members of the Athenaeum to adopt my suggestion, and yielding
to their judgment as to the best course to be pursued, I have complied with their request,
though by no means convinced of its wisdom or expediency.

J. C.
